

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013077**Date Inspected:** 29-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG TRIAL ASSEMBLY

SEGMENT: 7AE-7BE-Panel Point(PP)#49~50 .

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005431.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The member is identified as OBG Segment: 7 AE-7BE on "T" and "I" Rib holdback weld Components. Total number of welds MT Tested: 84 No's. The weld designations are review as follows:

- | | |
|-----------------------|--------------------------------|
| 1. DP662-001-017,018. | 15. SP610-001-007,008. |
| 2. DP663-001-012,013. | 16. SP611-001-011,012. |
| 3. EP089-001-009,010. | 17. SP570-001-029,030,035,036. |

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4. EP090-001-005,006.	18. SP571-001-022,023,028,029.
5. SP461-001-027,028.	19. SP530-001-035,036,041,042.
6. SP462-001-017,018.	20. SP531-001-021,022,027,028.
7. SP310-001-029~032.	21. SP447-001-025,026.
8. SP311-001-001~004.	22. SP450-001-025,026.
9. SP337-001-011,012.	23. EP077-001-007,008.
10. SP338-001-011,012.	24. EP078-001-009,010.
11. SP364-001-031~034.	25. DP654-001-015,016.
12. SP365-001-007~010.	26. DP655-001-009,010.
13. BP062-001-031~034.	27. BP170-001-025,026,031,032,035,036.
14. BP063-001-037~040.	28. BP171-001-031,032,037,038,041,042.

This QA Inspector Randomly observed the following work in progress:

SEGMENT: 7CE Deck Panel to Edge Panel (Crossbeam Side).

Shielded Metal Arc Welding (SMAW) welding of Repair weld joint CA039-004. Welder is identified as 058087. ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-2G (2F) FCM-Repair-1 .The repair welding was been performed against the Caltrans Engineer Approved Critical Welding Repair Report (CWR) No: B-CWR 1325 Rev. No: 0 and American Bridge/Fluor (AB/F) UT report # UT-7E-033 dated: 03/14/2010.

SEGMENT: 7CE Deck Panel to Edge Panel (Bike Path Side).

Shielded Metal Arc Welding (SMAW) welding of Repair weld joint CA040-004. Welder is identified as 048047. ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-2G (2F) FCM-Repair-1 .The repair welding was been performed against the Caltrans Engineer Approved Critical Welding Repair Report (CWR) No: B-CWR 1227 Rev. No: 1 and American Bridge/Fluor (AB/F) UT report # UT-7E-032R1 dated: 03/24/2010.

SEGMENT: 7BE-7CE, Deck panel.

This QA Inspector observed American Bridge/Fluor (AB/F) QA Inspectors performing Ultrasonic Testing (UT) for Deck panel Transverse splice welds at SEGMENT: 7BE-7CE.

The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer